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Governor Brad Little Director John H. Tippets

September 30, 2019

Earl DeFur, Owner Sonbyrd Industries, Inc. 1963 Hwy 52 W Emmett, ID 83617

RE:

Facility ID No. 045-00005, Sonbyrd Industries, Inc., Emmett

Final Permit Letter

Dear Mr. DeFur:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2019.0023 Project 62230 to Sonbyrd Industries, Inc. located at Emmett for the permit modification to switch to emission based limits. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received May 6, 2019.

This permit is effective immediately and replaces PTC No. 045-00005, issued on May 22, 2000. This permit does not release Sonbyrd Industries, Inc. from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Boise Regional Office, 1445 N. Orchard, Boise, ID 83706, Fax (208) 373-0287.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a permit handoff meeting with David Luft, Air Quality Manager, at (208) 373-0201 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Zach Pierce at (208) 373-0502 or zach.pierce@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Mike Simon

Stationary Source Program Manager

Air Quality Division

MS\zp

Permit No. P-2019.0023 PROJ 62230

Enclosures

Printed on Recycled Paper

Air Quality

PERMIT TO CONSTRUCT

Permittee Sonbyrd Industries Inc.

Permit Number P-2019.0023

Project ID 62230

Facility ID 045-00005

Facility Location 1963 Hwy 52 West

Emmett, ID 83617

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any lability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued

September 30, 2019

Zach Pierce, Permit Writer

Mike Simon, Stationary Source Manager

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1 Permit Scope

Purpose

- 1.1 This is a modified permit to construct (PTC) to install and operate a new building with two unit heaters as well as add UV coating spray equipment with a make-up-air unit in a currently permitted building. Also this PTC will make limits emissions-based rather than its current state of usage-based and incorporate the three natural gas make-up-air heaters and seven natural gas unit heaters that are existing but weren't included in the previous permit.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. 045-00005, issued May 22, 2000.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit	Sources	Control Equipment
Section	Sources	Control Equipment
	PB1 Paint Spray Gun No. 1 Manufacturer: Kremlin Model: Xcite Gun type: Air-Assisted Airless Transfer efficiency: 86% Paint Spray Gun No. 2 Manufacturer: Graco Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 65%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99.43%
2	PB2 Paint Spray Gun No. 1 Manufacturer: Kremlin Model: Xcite Gun type: Air-Assisted Airless Transfer efficiency: 86% Paint Spray Gun No. 2 Manufacturer: Graco Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 65%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99,43%
	LS1 Linear Spray Guns No. 1-2 Manufacturer: Graco Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 65%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99.43%

Permit Section	Sources	Control Equipment
2	PB3 Coating Spray Guns No. 1-6 Manufacturer: Kremlin Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 86%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99.43%
	UV Electric Cure Oven 1 Manufacturer: Holytek Model: KUV-901+G+D Manufacture Date: 1996	None
3	Make-Up-Air Units 1-3 Manufacture Date: 1990 Heat input rating: Natural Gas Make-Up-Air Unit 4 Manufacture Date: 1990 Heat input rating: 0.2 MMBtu/hr Fuel: Natural Gas Unit Heaters 1, 2, 4 Manufacture Date: 1990 Heat input rating: 0.075 MMBtu/hr Fuel: Natural gas Unit Heater 3 Manufacture: Nodel: 1990 Heat input rating: 1990 Unit Heaters 5, 6 Manufacture: Janitrol Model: UH-100-E2 Manufacture Date: 1990 Heat input rating: Fuel: 1990 Heat input rating: 1990 Manufacturer: Sterling Model: TF-250 Manufacture Date: 2018 Heat input rating: 0.25 MMBtu/hr Natural Gas	None
4	Wood Shaping Activities Sawdust generated from wood shaping is collected and deposited in bins.	Baghouse Control with Cyclone

[09/30/2019]

2 Paint Booth Units

2.1 Process Description

The coating operation is conducted in one of four enclosed spray booths that are located in an existing room inside Building 1. Three of the booths (PB1, PB2, LS1) are used for coating wood parts with traditional paint, stain and lacquer. The fourth booth (PB3) will be used for spraying wood parts with UV-cured coatings. An electric UV oven (UO1) will be used to cure the painted items from booth PB3. Exhaust fans draw air and paint fumes through the booths/oven and the exhaust filters, discharging through stacks on the roof of the buildings. Emissions from all the paint booth units are based on the paints used and their compositions.

Control Device Descriptions

The exhaust plenums in the spray booths are equipped with panels holding Paint Pockets Overspray Arrestors. In order to reduce paint use and emissions another way, Sonbyrd uses either Graco air-assisted airless (AAA) paint guns or Kremlin AAA paint guns in their various paint booths.

Table 2.1 Paint Booth Unit Descriptions

Source ID No.	Emission Units	Control Equipment
PB 1	Paint Spray Gun No. 1 Manufacturer: Kremlin Model: Xcite Gun type: Air-Assisted Airless Transfer efficiency: 86% Paint Spray Gun No. 2 Manufacturer: Graco Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 65%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99.43%
PB 2	Paint Spray Gun No. 1 Manufacturer: Kremlin Model: Xcite Gun type: Air-Assisted Airless Transfer efficiency: 86% Paint Spray Gun No. 2 Manufacturer: Graco Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 65%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99.43%
LS 1	Linear Spray Guns No. 1-2 Manufacturer: Graco Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 65%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99.43%

Source ID No.	Emission Units	Control Equipment
PB 3	Coating Spray Guns No. 1-6 Manufacturer: Kremlin Model: Airpro Gun type: Air-Assisted Airless Transfer efficiency: 86%	Completely Enclosed Booth with Exhaust Filters: Manufacturer: Paint Pockets Model: Paint Pockets Green PM Control efficiency: 99.43%
UO1	UV Electric Cure Oven 1 Manufacturer: Holytek Model: KUV-901+G+D Manufacture Date: 1996	None

Emission Limits

2.2 Emission Limits

The emissions from the Paint Booths shall not exceed any corresponding emissions rate limits listed in Table 2.2.

Table 2.2 Paint Booth Emission Limits (a)

Source Description	PM _{2.5} /PM ₁₀ (b)	VOC ^(c)	Individual HAP ^{(d)(e)}	Total HAP(d)(f)
Description	T/yr (g)	T/yr (g)	T/yr ^(g)	T/yr ^(g)
Booths ^(h)	0.643	70.00	9.99	21.95

- In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and record keeping requirements.
- b) Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5}), including condensable particulate as defined in IDAPA 58.01.01.006.
- c) Volatile organic compounds (VOC).
- d) Hazardous air pollutants (HAP).
- e) Emission limit for each HAP.
- f) Emission limit for total of all HAP (combined).
- g) Tons of emissions from all Paint Booth stacks (combined) per any consecutive 12 calendar month period.
- h) Booths include emissions from Paint Booth 1, 2, 3; Linear Sprayer; and UV Electric Cure Oven.

[09/30/2019]

2.3 Opacity Limit

Emissions from the Paint Booth No. 1, Paint Booth No. 2, Paint Booth No. 3, Linear Spray Booth No. 1, and UV Cure Oven No.1 stacks, or any other stack, vent, or functionally equivalent opening associated with Paint Booth No. 1, Paint Booth No. 2, Paint Booth No. 3, Linear Spray Booth No. 1, and UV Cure Oven No.1, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[05/22/2000]

2.4 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property in accordance with IDAPA 58.01.01.776.

Operating Requirements

Coating Scenarios

Unless using a previously approved Coating Scenario for which compliance has been determined, each day before coating materials are used the permittee shall follow the procedures of this section to develop a Coating Scenario. The permittee shall not use any new Coating Scenario until Coating TAP compliance and Coating Emission Limit compliance have been demonstrated for that Scenario according to the following permit conditions.

Coating Scenarios can be set for daily coating operations where a day is a consecutive 24-hour period.

2.5 Propose a Coating Scenario

Prior to using or implementing a new Coating Scenario:

- The permittee shall propose and record maximum coating limits for each coating material that will be used in the Scenario, in gallons per day (gal/day). The permittee shall not use or implement any Scenario that does not have recorded maximum coating limits.
- For the Scenario, the permittee shall estimate emissions of all TAP listed in Table 2.3 (lb/day) and estimate emissions of PM₁₀/PM_{2.5}, VOC, individual HAP, and total HAP (lb/365-day period for each pollutant) using the procedures described below for estimating emissions.
- The permittee shall demonstrate coating TAP compliance for the Scenario, using the procedures described below for demonstrating coating TAP compliance. The permittee shall not use or implement any Scenario that does not demonstrate coating TAP compliance.
- The permittee shall demonstrate Coating Emission Limit compliance for the Scenario, using the procedures described below for demonstrating Coating Emission Limit compliance. The permittee shall not use or implement any Scenario that does not demonstrate Coating Emission Limit compliance.
- The coating limits and emission estimates used in determining coating TAP compliance and Coating Emission Limit compliance shall be based on estimated emissions from all coatings to be used from all coating operations at the facility (i.e., facility-wide).

[09/30/2019]

2.6 Estimate Coating TAP Emissions

TAP emissions shall be estimated for all TAP listed in Table 2.3:

- Emissions shall be estimated by multiplying each maximum coating usage rate (gal/day) by the TAP content (lb/gal) of that coating, and summing the total emissions from all coating materials in the specified time period (lb/day). TAP emissions which are designated as a particulate in Table 2.3 may also be multiplied by one minus the documented spray gun transfer efficiency and by one minus the documented filtration system control efficiency when control equipment will be applied to such emissions. Alternatively, for isocyanate-based "iso" materials such as those used in 2-part urethane systems, isocyanate-based TAP emissions may instead be multiplied by one minus the documented spray gun transfer efficiency and by 15% to account for the isocyanate reaction.
- TAP content (lb/gal) of a coating is specified on the Safety Data Sheet (SDS) or an equivalent manufacturer data sheet for that coating, or shall be calculated by multiplying the weight percentage of TAP (%) by the density (lb/gal) of the coating from the SDS.
- For TAP content, if a range is presented on the SDS for a coating, the highest value of the range shall be used when estimating emissions.

- When the TAP content is listed as below detection on SDS or other documentation, the TAP content shall be assumed equal to the coating density divided by 100 (i.e., 1% of density in lb/gal) when estimating emissions.
- When the TAP content cannot be determined from SDS or other documentation, the TAP content shall be assumed equal to the density of the coating (lb/gal) when estimating emissions.
- When a coating contains a TAP not listed in Table 2.3, the coating cannot be used.

[09/30/2019]

2.7 Demonstrate Coating TAP Compliance

For each Coating Usage Scenario, the permittee shall estimate TAP emissions from all coating operations and compare against the TAP Screening Emission Rates or Modeled Concentration Limits in Table 2.3:

- The permittee shall compare estimated TAP emissions for all coatings against the Screening Emission Rates in Table 2.3. For emissions equal or less than the Screening Emission Rate, modeling analyses is not required. For emissions in excess of the Screening Emission Rate, modeling analyses is required to determine the maximum modeled concentration.
- Modeled emissions from all coating operations for a Coating Usage Scenario shall not exceed the Modeled Concentration Limits in Table 2.3. The permittee shall not use or implement any Scenario that exceeds a Modeled Concentration Limit.
- All modeling analyses shall use EPA-approved models and follow relevant guidance in the most recent version of the "State of Idaho Guideline for Performing Air Quality Impact Analyses," available for download at DEQ's website.

[09/30/2019]

Table 2.3 TAP Screening Emission Rates and Modeled Concentration Limits

				Screening Emission Rate	Modeled Concentration Limit
TAP	CAS	Particulate?	HAP?	(lb/day) (a)	$(mg/m^3)^{(b)}$
Acetone	67-64-1	No	No	2856	89
Acetaldehyde ^(d)	75-07-0	No	Yes	0.072	0.00045
Acrylamide ^(d)	79-06-1	No	Yes	0.0001224	0.00000077
Acrylic Acid	79-10-7	No	Yes	48	1.5
Aluminum - Metal and Oxide	7429-90-5	Yes	No	16.008	0.5
Aluminum - Soluble Salts	7429-90-5	Yes	No	3.192	0.1
n-Amyl Acetate	628-63-7	No	No	847.2	26.5
Antimony	7440-36-0	Yes	Yes	0.792	0.025
Barium	7440-39-3	Yes	No	0.791	0.025
Benzene ^(d)	71-43-2	No	Yes	0.0192	1.20E-04
Benzo(a)pyrene ^(d)	50-32-8	No	Yes	0.000048	3.0E-07
Benzoyl Peroxide	94-36-0	No	No	7.992	0.25
Bis (2-Ethylhexyl) Phthalate (DEHP) (d)	117-81-7	No	Yes	0.672	0.0042
2-Butoxyethanol (EGBE; Ethylene Glycol Monobutyl Ether)	111-76-2	No	No	192	6
2-Butoxyethyl Acetate	112-07-2	No	Yes	199.92	1.25
n-Butyl Acetate	123-86-4	No	No	1135.2	35,5
tert-Butyl Acetate	540-88-5	No	No	1519.2	47.50
n-Butyl Alcohol	71-36-3	No	No	240	7.5
Sec-Butyl Alcohol (2-Butanol)	78-92-2	No	No	487.2	15.25
Butyl Hydroxytoluene (2,6-Di-tert-butyl-p-cresol)	128-37-0	No	No	16,008	0,5
Calcium Carbonate (Limestone)	1317-65-3	Yes	No	16.008	0.5
Calcium Sulfate (Gypsum)	13397-24-5	Yes	No	16.008	0.5
Carbon Black	1333-86-4	Yes	No	5.52	0.175
Carbon Tetrachloride ^(d)	56-23-5	No	Yes	0.01056	0.000067
Chloroform ^(d)	67-66-3	No	Yes	0.00672	0.000043
Chromium	7440-47-3, 16065-83-1	Yes	Yes	0.791	0.025
Chromium (VI) (d)	18540-29-9	Yes	Yes	0.00001344	8.3E-08
Cobalt	7440-48-4	Yes	Yes	0.0791	0.0025
Copper	7440-50-8	Yes	No	1.607	0.05
Cumene	98-82-8	No	Yes	391.2	12.25
Cyclohexane	110-82-7	No	No	1680	52.5
Cyclohexanone	108-94-1	No	No	160.08	5
Diacetone Alcohol	123-42-2	No	No	384	12
Dibutyl Phthalate (DBP)	84-74-2	No	Yes	7.992	0.25
1,4-Dichlorobenzene	106-46-7	No	Yes	720	22.5
o-Dichlorobenzene	95-50-1	No	No	480	15
Diethyl Phthalate	84-66-2	No	No	7.992	0.25
Diisobutyl Ketone	108-83-8	No	No	232.08	7.25
Dîmethylphthalate (DMP)	131-11-3	No	Yes	7.992	0.25
Diphenyl (Biphenyl)	92-52-4	No	Yes	2.4	0.075
Dipropylene Glycol Methyl Ether	34590-94-8	No	No	960	30
Ethanolamine (2-Aminoethanol; Monoethanolamine)	141-43-5	No	No	12,792	0.4
Ethyl Acetate	141-78-6	No	No	2239.2	70
Ethyl Alcohol	64-17-5	No	No	3000	94
Ethyl Benzene	100-41-4	No	Yes	696	21.75
Ethylene Glycol	107-21-1	No	Yes	20.304	6.35
Ethylenediamine (1,2-Diaminoethane)	107-15-3	No	No	40.08	1.25
Formaldehyde ^(d)	50-00-0	No	Yes	0.01224	7.70E-05
Furfuryl Alcohol	98-00-0	No	No	64.08	2
Heptane (n-Heptane)	142-82-5	No	No	2616	82
Hexamethylene Diisocyanate (c)	822-06-0	No	Yes	0.048	0.0015
Hexane (n-Hexane)	110-54-3	No	Yes	287.9	9
Hydroquinone	123-31-9	No	Yes	3.192	0.1
Iron Oxide (Fe ₂ O ₃)	1309-37-1	Yes	No	7.992	0.25
Isobutyl Acetate	110-19-0	No	No	1120.8	35
Isobutyl Alcohol	78-83-1	No	No	240	6

				Screening Emission Rate	Modeled Concentration Limit
TAP	CAS	Particulate?	HAP?	(lb/day) (a)	$(mg/m^3)^{(b)}$
Isophorone Diisocyanate	4098-71-9	No	No	0.144	0.0045
Isopropyl Alcohol (Isopropanol)	67-63-0	No	No	1567.2	49
Isopropyl Acetate	108-21-4	No	No	1663.2	52
Kaolin	1332-58-7	Yes	No	3.192	0.1
Lead	7439-92-1	Yes	Yes	0,328	0.00015
Manganese	7439-96-5	Yes	Yes	7.991	0.25
Magnesite (Magnesium Carbonate)	546-93-0	Yes	No	16.008	0.5
Methacrylic Acid	79-41-4	No	No	112,08	3.5
Methanol	67-56-1	No	Yes	415,2	13
1-Methoxy-2-Propanol Acetate (PGMEA)	108-65-6	No	No	576	3.6
2-Methoxyethyl Acetate (EGMEA; Ethylene Glycol Monomethyl Ether Acetate)	110-49-6	No	Yes	38.4	1.2
Methyl Acetate	79-20-9	No	No	976.8	30.5
Methyl n-Amyl Ketone (Heptan-2-one)	110-43-0	No	No	376.8	11.75
Methyl Chloroform	71-55-6	No	Yes	3048	95,5
Methyl Ethyl Ketone (MEK)	78-93-3	No	No	943.2	29.5
Methyl Isoamyl Ketone	110-12-3	No	No	384	12
Methyl Isobutyl Carbinol	108-11-2	No	No	166,32	5.2
Methyl Isobutyl Ketone (MIBK)	108-10-1	No	Yes	328.8	10.25
Methyl Methacrylate	80-62-6	No	Yes	655.2	20.5
o-Methylcyclohexanone	583-60-8	No	No	367.2	11,5
Methylene Bis (4-Cyclohexyl Isocyanate) (H12MDI; Dicyclohexylmethane 4,4'- Diisocyanate) (d)	5124-30-1	No	No	0.168	0.0055
Methylene Chloride (Dichloromethane) (d)	75-09-2	No	Yes	0.0384	2.40E-04
Methylene Diisocyanate (MDI; 4,4'- Diphenylmethane Diisocyanate) (c)	101-68-8	No	Yes	0.072	0.0025
Methyl Propyl Ketone (2-Pentanone)	107-87-9	No	No	1120.8	35
Mica	12001-26-2	Yes	No	4.8	0.15
Molybdenum	7439-98-7	Yes	No	7.991	0.25
Naphthalene	91-20-3	No	Yes	79,92	2,5
Nickel ^(d)	7440-02-0	Yes	Yes	0.000648	4.20E-06
Nonane	111-84-2	No	No	1680	52,5
Pentane	109-66-0	No_	No	2831,9	88,5
Phenol	108-95-2	No	Yes	30.48	0.95
Phosphoric Acid	7664-38-2	No	No	1.608	0.05
Portland Cement	65997-15-1	Yes	No	16,008	0.5
Propionic Acid	79-09-4	No	No	48	1.5
n-Propyl Acetate	109-60-4	No	No	1344	42
Propyl Alcohol	71-23-8	No	No	799.2	25
Selenium	7782-49-2	Yes	Yes	0.311	0.01
Silica - Amorphous, including:					
Diatomaceous Earth (uncalcined)	61790-53-2	Yes	No	16.008	0,5
Precipitated Silica	112926-00-8	1 65	INO	10.006	0,5
Silica Gel					
Silica - Crystalline - Cristobalite	14464-46-1	Yes	No	0.0792	0.0025
Silica - Crystalline Quartz & Fused Silica	14808-60-7	Yes	No	0.1608	0.005
Sodium Hydroxide (Caustic Soda)	1310-73-2	No	No	3.192	0.1
Stoddard Solvent	8052-41-3	No	No	840	26,25
Styrene	100-42-5	No	Yes	160.08	1
Tetrachloroethylene (PCE; Perchloroethylene)	127-18-4	No	Yes	0.312	0.0021
Tetrahydrofuran	109-99-9	No	No	943.2	29.5
Toluene	108-88-3	No	Yes	599.99	18.75
Trichloroethylene (TCE)	79-01-6	No	Yes	430,32	0.00077
Triethylamine	121-44-8	No	Yes	6.48	0.2
Trimethyl Benzene (Mixed and Individual Isomers)	25551-13-7	No	No	196.8	6.15
2,2,4-Trimethylpentane	540-84-1	No	Yes	559.2	17.5
Vinyl Acetate	108-05-4	No	Yes	55.2	1.75

				Screening Emission Rate	Modeled Concentration Limit
ТАР	CAS	Particulate?	HAP?	(lb/day) (a)	$(mg/m^3)^{(b)}$
Vinyl Chloride(d)	75-01-4	No	Yes	0.02256	0.00014
VM&P Naphtha (Petroleum Ether, Ligroin)	8032-32-4	No	No	2191.2	68.5
Xylene (o-, m-, p-isomers)	1330-20-7	No	Yes	696	21.75
Zinc	7440-66-6	Yes	No	16.006	0.5
Zinc Oxide	1314-13-2	Yes	No	16.008	0.5
Zirconium	7440-67-7	Yes	No	7.992	0.25

- Worst-case pounds of emissions from all coating operations (combined) per day, as calculated using procedures in this permit to estimate TAP emissions, or as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ-approved alternative.
- b) Milligrams of toxic air pollutant (TAP) per cubic meter, modeling proposed emission rates calculated using a daily averaging period.
- c) Isocyanate-based TAP for the purposes of estimating coating TAP emissions (Permit Condition 2,6).
- d) TAP found in IDAPA 58.01.01.586.

2.8 Demonstrate Coating Emission Limit Compliance

For each Coating Usage Scenario, the permittee shall estimate emissions from all coating operations and compare against the Coating Emission Limits in Table 2.2:

- Annual PM₁₀/PM_{2.5}, VOC, and HAP emissions shall be determined by summing the daily usage (gal/day) over the previous consecutive 365-day period and using pollutant concentrations listed in material data sheets. Emission estimates for each pollutant (lb/365-day period) shall be divided by 2000 pounds per ton (lb/T).
- For solids content, VOC content, and HAP content, if a range is presented on the SDS for a coating, the highest value of the range shall be used when estimating emissions.
- When the solids content, VOC content, or HAP content is listed as below detection on SDS or other documentation, the HAP content shall be assumed equal to the coating density divided by 100 (i.e., 1% of density in lb/gal) when estimating emissions.
- When the solids content, VOC content, or HAP content cannot be determined from SDS or other documentation, the content shall be assumed equal to the density of the coating (lb/gal) when estimating emissions.
- The permittee shall compare estimated emissions for all coating materials against the Coating Emission Limits in Table 2.2. The permittee shall not use or implement any Scenario that exceeds a Coating Emission Limit.

[09/30/2019]

2.9 Paint Booth Filter System

The permittee shall monitor and record visible emissions from the spray booth filter system once per quarter when operating (for any day that a coating operation is performed in the paint spray booths) to demonstrate compliance with the opacity limit Permit Condition. The inspection shall consist of a see/no see evaluation for the paint spray booth exhaust system. If any visible emissions are present from the paint spray booth exhaust system, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and opacity test and a description of the following: the permittee's assessment of the

conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

[09/30/2019]

2.10 Baghouse/Filter System Procedures

Within 60 days of permit issuance, the permittee shall have developed a Baghouse/Filter System Procedures document for the inspection and operation of the baghouses/filter system which controls emissions from the paint booth filter system. The Baghouse/Filter System Procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

The Baghouse/Filter System Procedures document shall describe the procedures that will be followed to comply with the General Compliance General Provision and shall contain requirements for quarterly see-no-see visible emissions inspections of the baghouse. The inspection shall occur during daylight hours and under normal operating conditions.

The Baghouse/Filter System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at any time. At a minimum the document shall include:

- procedures to determine if bags or cartridges are ruptured; and
- procedures to determine if bags or cartridges are not appropriately secured in place.

The Permittee shall maintain records of the results of each baghouse/filter system inspections in accordance with the Recordkeeping General Provision. The records shall include a description of whether visible emissions were present and if visible emissions were present a description of the corrective action that was taken.

The Baghouse/Filter System Procedures document shall be submitted to DEQ within 60 days of permit issuance for review and comment and shall contain a certification by a responsible official. Any changes to the Baghouse/Filter System Procedures document shall be submitted within 15 days of the change.

The Baghouse/Filter System Procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

The operating and monitoring requirements specified in the Baghouse/Filter System Procedures document are incorporated by reference to this permit and are enforceable permit conditions.

[09/30/2019]

2.11 Prohibition from Using MeCl to Remove Paint

The permittee shall not use Methylene Chloride (MeCl) to remove paint at this facility.

[09/30/2019]

2.12 Spray Gun and Spray Booth Filter System

All coating at this facility shall be conducted inside the booth with filters in place, fan(s) operating, and if they have door(s), they should be closed.

All coating shall be conducted with a HVLP spray gun with a minimum 60% transfer efficiency.

The permittee shall install, maintain, and operate according to the manufacturer's specifications and recommendations, a spray booth filter system with a minimum capture efficiency of 99.43% for PM emissions.

Monitoring, Recordkeeping, and Reporting Requirements

2.13 Coating Recordkeeping

The permittee shall collect and maintain records of the quantity of each material used for each day to demonstrate compliance with the Coating Scenario requirements.

- The daily-material usage shall be compared against the maximum material usage listed in the selected scenario. The maximum material use for a scenario already will have determined compliance with the Coating Emission Limits; therefore, the usage records must equal to or less than the maximum material usage for the selected scenario.
- Material Usage above the maximum material usage listed for the selected scenario shall be treated as excess emission event(s), and the permittee shall report these in accordance with the excess emission procedures and requirements provided in the General Provisions of this permit.

[09/30/2019]

2.14 Coating Scenario Monitoring

Each calendar day on which a Coating Scenario will be used, the permittee shall select and record the Coating Scenario that will be used for that day, and comply with the maximum coating limits specified for the selected Scenario.

- Only one Coating Scenario may be used each calendar day.
- The permittee shall not exceed any coating limit for the Scenario chosen for that time period.
- The permittee shall maintain documentation such as coating material SDS, manufacturer's specification sheets that support filter control efficiencies, transfer efficiencies, capture efficiencies, and other engineering assumptions relied upon in emission calculations.

[09/30/2019]

2.15 Coating Material Purchase and Safety Data Sheet Recordkeeping

For each coating material used at the facility the permittee shall record and maintain the following records:

- Material purchase records
- Safety Data Sheets (SDS) or an equivalent manufacturer data sheet

[09/30/2019]

2.16 Coating Scenario Reporting

Each year, for Coating Scenarios that have not already been submitted to DEQ, the permittee shall submit a report by May 1st on all unapproved Coating Scenarios used each calendar day during the previous 365-day period. The report shall include documentation supporting the TAP compliance demonstrations and the Coating Emission Limit compliance demonstrations relied upon for each Coating Scenario, and any modeling analyses conducted in each coating TAP compliance demonstration. Documentation should be in sufficient detail, including documentation of all calculations and electronic copies of modeling files, such that DEQ can verify the analysis. The report shall be titled "Permit-Required TAP Compliance Report" and shall be sent to:

DEQ State Office Air Quality Division 1410 N. Hilton Boise, ID 83706

2.17 Odor Complaints

The permittee shall maintain records of all odor complaints received to demonstrate compliance with the odors Permit Condition. The permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

[09/30/2019]

2.18 Manufacturer Specifications Records

Documentation such as manufacturer's specification sheets that supports filter efficiencies, transfer efficiencies, capture efficiencies, and other engineering assumptions relied upon in emission calculations shall be maintained onsite.

[09/30/2019]

2.19 Recordkeeping

The permittee shall comply with the recordkeeping requirements General Provision.

3 Make-Up-Air Units and Unit Heaters

3.1 Process Description

In Building 1, fresh outside air is supplied to the Paint Room through vents and four make-up air units, MAU1, MAU2, MAU3, and MAU4. For cold weather operations, each MAU includes an indirect-fired, natural gas-fueled air heater with a design input duty. There are nine natural-gas powered unit heaters throughout the site (UH1-UH9), four in Building 1, three in Building 2 and two new units in the new building, Building 3.

Table 3.1 Make-Up-Air Units and Unit Heaters Descriptions

Source ID No.	Emission Units	Control Equipment
MAU1-MAU3	Make-Up-Air Units 1-3 Manufacture Date: 1990 Heat input rating: 0.1 MMBtu/hr Fuel: Natural Gas	
MAU4	Make-Up-Air Unit 4 Manufacture Date: 2019 Heat input rating: 0.2 MMBtu/hr Fuel: Natural Gas	
UH1, UH2, UH4	Unit Heaters 1, 2, 4 Manufacturer: Heatcraft Inc. Model: UH-75 Manufacture Date: 1990 Heat input rating: 0.075 MMBtu/hr Fuel: Natural gas	
UH3	Unit Heater 3 Manufacturer: Nodine Manufacturing Co. Model: HD 75AH0134 "Hot Dawg" Manufacture Date: 1990 Heat input rating: 0.075 MMBtu/hr Fuel: Natural Gas	None
UH5, UH6	Unit Heaters 5, 6 Manufacturer: Janitrol Model: UH-100-E2 Manufacture Date: 1990 Heat input rating: 0.1 MMBtu/hr Fuel: Natural Gas	
UH7	Unit Heater 7 Manufacturer: Janitrol Model: UH-70-E2 Manufacture Date: 1990 Heat input rating: 0.07 MMBtu/hr Fuel: Natural Gas	
UH 8 , U H9	Unit Heaters 8, 9 Manufacturer: Sterling Model: TF-250 Manufacture Date: 2018 Heat input rating: 0.25 MMBtu/hr Fuel: Natural Gas	

Emission Limits

3.2 Emission Limits

The emissions from the Make-Up-Air Units and Unit Heaters stacks shall not exceed any corresponding emissions rate limits listed in Table 3.2.

Table 3.2 Make-Up-Air Units and Unit Heaters Emission Limits (a)

Source PM ₁₀ /PM _{2.5} SO ₂		NO _X		СО		VOC				
Description	lb/hr ^(c)	T/yr (d)	lb/hr ^(c)	T/yr (d)	lb/hr ^(c)	T/yr (d)	lb/hr ^(c)	T/yr (d)	lb/hr ^(c)	T/yr (d)
Make-Up-Air Units and Unit Heaters (e)	0.012	0.05	9.2E-04	4.0E-03	0.15	0.67	0.13	0.57	8.5E-03	3.7E-02

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- d) Tons per any consecutive 12-calendar month period.
- e) Make-Up-Air Units and Unit Heaters include Make Up Air Units 1-4 and Unit Heaters 1-9.

[09/30/2019]

3.3 Opacity Limit

Emissions from the Make-Up-Air Units and Unit Heaters stacks, or any other stack, vent, or functionally equivalent opening associated with the Make-Up-Air Units and Unit Heaters, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

3.4 Fuel Burning Equipment - Particulate Matter - 58.01.01.675

In accordance with IDAPA 58.01.01.676, the permittee shall not discharge PM to the atmosphere from any fuel-burning equipment in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas.

[09/30/2019]

Operating Requirements

3.5 Natural Gas Usage Limits

The total combined Natural Gas usage for the Make-Up-Air Units and Unit Heaters shall not exceed 137,500 therms per any consecutive 12-month period.

[09/30/2019]

3.6 Allowable Fuel Types

The Make-Up-Air Units and Unit Heaters shall only combust natural gas as fuel.

[09/30/2019]

Monitoring and Recordkeeping Requirements

3.7 Annual Natural Gas Usage Limits Monitoring

Each calendar month, the permittee shall monitor and record the natural gas usage for the previous month in therm per month. Natural gas usage shall be determined by summing the monthly usage over the previous consecutive 12-month period to demonstrate compliance with the Natural Gas Usage Limits permit condition.

4 Wood Shaping

4.1 Process Description

Shaping of wooden parts creates sawdust that is collected with vacuums and deposited into collection bins. The carrier air is filtered with cloth filter bags.

Table 4.1 Wood Shaping Description

[09/30/2019]

Source ID No.	Emissions Units / Processes	Control Devices
WS1	Wood Shaping Activities	Baghouse Control with Cyclone

Operating Requirements

4.2 Production Limits

The total production of sawdust shall not exceed 1,210 tons during any consecutive 12-month period.

[09/30/2019]

4.3 Baghouse Operating Requirements

The permittee shall operate a baghouse to control PM emissions from the wood shaping activities.

Within 60 days of startup of wood shaping, the permittee shall have developed a baghouse procedures document for the inspection and operation of the baghouse which controls the PM emissions from the wood shaping activities. The baghouse procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

The baghouse procedures document shall describe the procedures that will be followed to comply with the General Compliance in the PTC General Provisions of this permit and shall contain requirements for quarterly see-no-see visible emissions inspections of the baghouse. The inspections shall occur during daylight hours and under normal operating conditions.

The baghouse procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at any time. At a minimum the document shall include:

- Procedures to determine if bags are ruptured; and
- Procedures to determine if bags are not appropriately secured in place.

The permittee shall maintain records of the results of each baghouse inspections in accordance with Monitoring and Recordkeeping in the General Provisions of this permit. The records shall include a description of whether visible emissions were present and if visible emissions were present a description of the corrective action that was taken.

The baghouse procedures document shall be submitted to DEQ within 60 days of permit issuance for review and comment and shall contain a certification by a responsible official. Any changes to the baghouse procedures document shall be submitted within 15 days of the change.

The baghouse procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

The operating and monitoring requirements specified in the baghouse procedures document are incorporated by reference to this permit and are enforceable permit conditions.

Monitoring and Recordkeeping Requirements

4.4 Production Monitoring

- The permittee shall monitor and record the production of sawdust from wood shaping in units of pounds per day based on engineering estimations of the fullness of each offsite shipment of sawdust. The records shall be maintained on site in accordance with Monitoring and Recordkeeping of the General Provisions of this permit.
- Each month, the permittee shall monitor and record the production of sawdust from wood shaping in units of tons for that month and for the most recent 12-month period. Annual production shall be determined by summing monthly production over the previous consecutive 12-month period.

[09/30/2019]

5 General Provisions

General Compliance

5.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq).

[Idaho Code §39-101, et seq.]

5.2 The permittee shall at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

5.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

- 5.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
 - Enter upon the permittee's premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
 - Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

5.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

- **5.6** The permittee shall furnish DEQ written notifications as follows:
 - A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
 - A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and

• A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/94]

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

- 5.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.
- 5.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.
- 5.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

5.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following:

(a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

5.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

5.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

5.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

5.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

5.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06. [IDAPA 58.01.01.209.06, 4/11/06]

Severability

5.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]